

## **Chain-of-Custody Guidance Document**

To better define the responsibilities of the permit holders and laboratories reporting regulatory monitoring data under the Department's environmental programs, the Office of Environmental Laboratory Certification has addressed some of the basic "Chain-of-Custody" considerations below:

Laboratories are required to develop a response mechanism to alert clients and/or sample collectors to deficiencies in the sample collection process. Deficiencies such as holding time violations, or improper sample containers, or sample preservation techniques always require re-sampling. It is recommended that these samples not be entered into the sample receipt logbook or assigned sample identification numbers.

For less critical deficiencies (not affecting the outcome of the analyses) such as incomplete or inadequate sample descriptions, or failure to record a date or time, the samples may be processed. However, the deficiency must be documented on sample custody form and noted on the final report submitted to clients and the Department.

While the permittee is legally responsible, laboratories must ensure that proper sample handling procedures are employed. The sample collection and handling procedures specified in the applicable Federal Register will be enforced under the Laboratory Certification Program and during data quality audits conducted by the Department or the Environmental Protection Agency.

Laboratories must notify their clients of all sample collection and handling problems. All technical problems and/or QC failures must also be reported. A footnote on the laboratory report or a separate discrepancy report (describing the deficiency, follow-up actions, and affected sample ID#s) may be used. This information must be submitted to clients along with the laboratory test results. The laboratory is responsible for maintaining records of such notifications.

While primarily intended to identify and eliminate sampling errors, the information provided to clients should indicate that the Department can reject the monitoring data and initiate non-compliance actions based upon improper sampling procedures. The laboratory may also wish to indicate that its "Certified" status can be revoked for failure to use the chain-of-custody procedures as required under the Certification Program. Data reported without supporting chain-of-custody records will not withstand legal challenge.

The month, day, and year of collection is not adequate as a Aunique@sample identification number since multiple samples from the same source, on the same day, would not be traceable. The date, however, may be incorporated as a part of the I. D. number. Sequence numbers along with a station number and bottle fraction codes (parameters) are required to properly identify samples.

The lab can use a field logbook or sample collection form (completed on-site by the sample collector) to record the test results performs on-site. The field records must specify the Program (DW, WW, Solid and Hazardous Waste, etc.), date and time collected, number of containers, tests required (from each container), and initials of the sample collector.

Upon arrival in the laboratory, the sample custodian must verify the chain-of-custody information, assign the Aunique@laboratory identification numbers to each sample, and place the sample ID#s on the sample containers, and cross-reference this information on the collection form.

The person designated as sample custodian must inspect all sample collection forms (at the time samples are delivered to the laboratory) to ensure the accuracy and completeness of the sample collection information. It is the responsibility of the laboratory to ensure the integrity of the sample before proceeding with the analyses.

The Sample Receipt Log must include: the date and time of arrival, number of containers, Unique@ sample ID#s, analyses to be performed (from each container), and sample custodian's initials. Entries should also describe the sample type for regulatory reporting such as "drinking water, wastewater, solid and hazardous waste, grab, composite, etc.". The laboratory may retain a copy of the chain-of-custody records or maintain an electronic (scan) copy.

#### **For Samples Sub-Contracted to a Second Laboratory:**

The type of sample (grab or composite), environmental program (DW, CWA, RCRA, or non-regulatory sample), originator's sample ID#, the original date and time of collection, and preservation information must be forwarded with a new sample custody form and letter of transmittal to the sub-contracted laboratory. While the original client need not be disclosed, sufficient information must be provided so that sub-contracting agents are able to verify that the sample has met the sample preservation and holding time requirements and may be reported as an official regulatory monitoring sample. Data qualification statements can be included with the reported test results to address any discrepant items.